

Issuance Date: September 15, 2005  
Effective Date: 15 days after startup  
Expiration Date: September 15, 2010

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
WASTE DISCHARGE PERMIT No. WA- 0039641

State of Washington  
DEPARTMENT OF ECOLOGY  
Olympia, Washington 98504-7706

In compliance with the provisions of  
The State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington  
And of  
The Federal Water Pollution Control Act  
(The Clean Water Act)  
Title 33 United States Code, Section 1251 et seq.

**Mint Farm Generation, L.L.C.**  
**C/O Mirant Corporation**  
**1155 Perimeter Center West**  
**Atlanta, Georgia 30338-5416**

Facility Location:  
1200 Prudential Blvd  
Longview, Washington 98632

Receiving Water  
Columbia River  
Water Quality Class A  
Consolidated Diking Improvement District  
Ditch #3

Water Body I.D. No.:  
  
Columbia River  
WA-CR-1010  
Segment No. 25-WRI-99

Discharge Location  
Waterway Segment No. 26-WRI-99  
Discharge 001/002:  
Latitude 46° 7' 51" N  
Longitude 122° 59' 26" W

CDID Ditch No. 3  
Segment No. 25-01-00

Stormwater:  
Discharge 003  
Stormwater Discharge to Mint Farm Industrial  
Park Stormwater System

Industry Type:  
298 MW Combined Cycle Power Plant

Is authorized to discharge in accordance with the following special and general conditions:

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Merley F. McCall  
Industrial Section Manager  
Washington State Department of Ecology

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## INTRODUCTION AND LEGAL AUTHORITY

The Department of Ecology (Ecology) issues this National Pollutant Discharge Elimination System (NPDES) Permit as prescribed by Chapter 173-220 Washington Administrative Code (WAC). This Permit integrates state and federal law, state and federal regulations, and Ecology's implementation policies. Ecology's authority to issue and enforce this NPDES Permit comes from Chapter 90.48 Revised Code of Washington (RCW) and from the federal Clean Water Act as described in 40 Code of Federal Regulations (CFR) Parts 100-149 and 400-471.

The provisions of this permit prescribe both effluent and discharge limitations, all monitoring and record keeping requirements, and the reporting schedule for the Mint Farm Generation (Longview, Washington) facility. This NPDES Permit consists of all parts of this document, including its footnotes and Appendices.

## SUMMARY OF REQUIRED PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

| Permit Section | Required Submittal                      | Frequency               | Submittal Date   |
|----------------|---|-------------------------|--|
| S1.C           | Temperature Study                       | 1/permit cycle          | Within 4 years from the permit's effective date          |
| S2.A           | Discharge Monitoring Report             | Monthly                 | 15 <sup>th</sup> day after the monitoring period         |
| S4.C           | Solid Waste Control Plan                | 1/permit cycle          | Within 3 years and 6 months from permit's effective date |
| S5.            | Non-routine or Unanticipated Discharges | As needed               | N/A  |
| S6.            | Spill Plan                              | Update annually         | Within 6 months from permit's effective date             |
| S7.            | Acute Toxicity Report                   | Quarterly for one year  | 90 days following the last sampling event                |
| S8.            | Chronic Toxicity Report                 | Biannually for one year | 90 days following the last sampling event                |
| G7.            | Application for permit renewal          | 1/permit cycle          | At least 180 days before permit expiration               |

## BASIS OF LIMITATIONS

Ecology based the terms and conditions of this NPDES Permit on the New Source Performance Standards defined by the federal Environmental Protection Agency (EPA) in its Effluent Guidelines and Standards for Steam Electric Power Generating (40 CFR 423.15) and Ecology's engineer's Best Professional Judgment (BPJ).

## SPECIAL CONDITIONS

### **S1. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS**

#### *A.1 Process Wastewater Discharge Limits at Effective Date*

All of the Permittee's wastewater discharges and related activities authorized by this NPDES Permit shall comply with the Permit's terms and conditions. Any more frequent, more concentrated, or any excess level of pollutant discharge than that authorized by this NPDES Permit shall constitute a violation of its terms and conditions. A violation of this Permit's terms or conditions may subject the Permittee to correction costs, and Ecology may also impose a penalty.

Ecology authorizes the Permittee to discharge wastewater containing pollutants resulting from its operations, beginning fifteen days after facility startup and lasting through the term of this Permit, so long as the Permittee complies with the following limitations:

|  | <b>EFFLUENT LIMITATIONS: OUTFALL # 001/002</b>  |                                   |
|--|---|-----------------------------------|
| Parameter                                      | Average Monthly <sup>a</sup>  | Maximum Daily <sup>b</sup>        |
| pH <sup>c</sup>                                | Daily minimum is equal to or greater than 6 and the daily maximum is less than or equal to 9. |                                   |
| Total Suspended Solids, mg/L                   | 30  | 100                               |
| Oil and Grease, mg/L                           | 15  | 20                                |
| Temperature, °F.                               | N/A   | 88                                |
| Chlorine, total residual, mg/L                 | 0.2   | 0.5                               |
| Chromium, mg/L <sup>f</sup>                    | 0.2   | 0.2                               |
| Zinc, mg/L <sup>f</sup>                        | 1.0   | 1.0                               |
| 126 Priority Pollutants less chromium and zinc | N/A   | No detectable amount <sup>d</sup> |
| Polychlorinated biphenyl compounds (PCB's)     | N/A   | Discharge Prohibited <sup>e</sup> |

|   |
|---|
| <p><sup>a</sup> The average monthly effluent limitation is defined as the highest allowable average of daily discharges measured during a calendar month. Calculate that limitation by taking the sum of all daily discharges measured during a calendar month, and dividing by the number of days that month on which discharges were measured. If only one sample is taken during the calendar month, the maximum daily effluent limitation applies to that sample.</p>   |
| <p><sup>b</sup> The maximum daily effluent limitation is defined as the highest allowable daily discharge. “Daily discharge” means the pollutant discharge measured during a calendar day. For pollutants with limitations expressed in units of mass, “daily discharge” means the total mass of the named pollutant discharged during one calendar day. For other units of measurement, the daily discharge is the average measurement of the pollutant during one day.</p>  |
| <p><sup>c</sup> Indicates the range of permitted values.</p>  |
| <p><sup>d</sup> Demonstrate compliance with these limits (non-detection) using the following procedures: Base/Neutral/Acids- EPA Method 625; Pesticides- EPA Method 608; Volatile compounds- EPA Method 624; Cyanide- EPA Method 335.2; Metals (except mercury)- GFAA detector method; Mercury- EPA Method 245.1 or 245.2, cold vapor; and Dioxin- EPA Method 1613. If an analyte is detected, the Permittee may also demonstrate compliance by comparing influent mass to effluent mass, to document that the detected pollutant(s) were not added by the Permittee.</p>   |
| <p><sup>e</sup> If PCB’s are not detected, demonstrate compliance using EPA Method 608 or an equivalent method. If PCB’s are detected, the Permittee may demonstrate compliance by comparing influent mass to effluent mass, and document that the detected pollutant(s) were not added by the Permittee.</p>   |
| <p><sup>f</sup> If the limit is exceeded, the Permittee may show compliance for these parameters by one of the following methods, if applicable: 1. If the Permittee can show that the effluent mass is no greater than the influent mass (via “Simultaneous Sampling” protocol listed under Monitoring Section), then the Permittee will be considered to be in compliance for that parameter. 2. If a limit for metals is exceeded and the Permittee can show that the exceedance was due to water use in excess of 1.85 MGD, and that the Permittee did not add any of the mass (via “Simultaneous Sampling” protocol listed under Monitoring Section), then the Permittee will be in compliance for that parameter.</p> |

## A.2 *Monitoring Schedule at Effective Date*

For outfall 001/002, the Permittee shall measure the following parameters at a point located on the Mint Farm Generation site--after any treatment--where the effluent enters the line flowing to the head box of the Weyerhaeuser Longview facility’s outfalls.

**MONITORING REQUIREMENTS:  
OUTFALL # 001/002**

| Parameter                     | Units                                   | Frequency                       | Sample Type                 |
|-------------------------------|---|---------------------------------|-----------------------------|
| <b>pH</b>                     | <b>Standard Units</b>                   | <b>Weekly</b>                   | <b>Grab</b>                 |
| Oil & Grease                  | Mg/L                                    | Weekly                          | Grab                        |
| <b>Flow</b>                   | <b>MGD</b>                              | <b>Continuous<sup>(d)</sup></b> | <b>Continuous Recording</b> |
| TSS                           | mg/L                                    | 1/week                          | 24-hour composite           |
| <b>Temperature</b>            | <b>°C.</b>                              | <b>Continuous<sup>(d)</sup></b> | <b>Continuous Recording</b> |
| Chlorine                      | mg/L                                    | 1/week                          | Grab                        |
| <b>Chromium</b>               | <b>mg/L</b>                             | <b>1/month</b>                  | <b>24-hour composite</b>    |
| Zinc                          | mg/L                                    | 1/month                         | 24-hour composite           |
| <b>Priority Pollutants</b>    | <b>µg/L</b>                             | <b>1/quarter</b>                | <b>24-hour composite</b>    |
| PCB's                         | µg/L                                    | 1/year                          | 24-hour composite           |
| <b>Acute Toxicity Testing</b> | <b>LC<sub>50</sub> &amp; % survival</b> | <b>1/quarter for one year</b>   | <b>24-hour composite</b>    |
| Chronic Toxicity Testing      | ACEC compared to control                | 2/year for one year             | 24-hour composite           |
| <b>Megawatts</b>              |   | <b>Daily</b>                    | <b>Daily Average</b>        |
| Steam                         | Pounds/hour                             | Daily                           | Daily Average               |
| <b>Natural gas</b>            | <b>BTU/day</b>                          | <b>Daily</b>                    | <b>Daily Average</b>        |

<sup>(c)</sup> Effluent sampling point shall be defined as the effluent stream as it leaves the Mint Farm facility, or where the effluent enters the Weyerhaeuser headbox to outfalls 001/002.

<sup>(d)</sup> Continuous means uninterrupted except for brief periods of time for calibration, power failure, or for unanticipated equipment repairs or maintenance.

*A.3 003 Stormwater Effluent Limits*

Beginning fifteen days after startup (the Permit's effective date) and lasting through the term of this Permit, the Permittee is authorized to discharge to the Consolidated Diking Improvement District Ditch #3 --through Discharge outfall 003-- the following wastewaters: stormwater, vehicle wash water, dust control water, area wash-up water, equipment wash water, non-contact cooling water overflow, and emergency fire control water. Ecology may authorize additional sources of discharge to the Longview Diking District #3, on a case-by-case basis.

If no measurable discharge occurs during any calendar month, samples will not be collected. The discharge is subject to the following limitations.

| Parameter       | Discharge 003                           |                  |                   |             |
|-----------------|---|------------------|-------------------|-------------|
|                 | Avg Day                                 | Day Max          | Minimum Frequency | Sample Type |
| pH              | Shall be within the range of 6.0 to 9.0 |                  | 1/quarter         | Grab        |
| Turbidity (NTU) | N/A                                     | N/A              | 1/QUARTER         | Grab        |
| Oil and Grease  | 10 mg/L                                 | 15 mg/L          | 1/quarter         | Grab        |
|                 |   | No visible sheen |                   | Visual      |

The Permittee shall sample stormwater discharges for the parameters listed in the above table.

The Permittee shall use those EPA standard methods considered appropriate for the required test. An accredited lab may substitute equivalent or superior test methods. All meters used onsite for sample analysis must be properly calibrated and operated in accordance with the manufacturers' instructions.

The definitions of terms used in this section are provided in the guidance document entitled *Stormwater Pollution Prevention Planning for Industrial Facilities*, which is published by the Department of Ecology.

**A. Plan Development Deadlines**

The Permittee shall implement all the elements of the SWPPP including operational, treatment and source control BMPs, as well as erosion and sediment control BMPs determined necessary.

**B. General Requirements**

**1. Submission, Retention, and Availability:**

The Permittee shall submit a copy of the SWPPP to the Department 15 working days before startup Ecology's review and comment. The permittee shall retain the SWPPP on-site.

**2. Modifications:**

The Permittee shall modify the SWPPP whenever there is a change in design, construction, operation or maintenance, which causes the SWPPP to be less effective in controlling the pollutants. Whenever the description of potential pollutant sources or the pollution prevention measures and controls identified in the SWPPP are inadequate, the SWPPP shall



be modified, as appropriate, within two (2) months of such determination. The proposed modifications to the SWPPP shall be submitted to the Department at least 30 days in advance of implementing the proposed changes in the plan for review and comment unless Ecology approves immediate implementation. The Permittee shall provide for implementation of any modifications to the SWPPP in a timely manner.

3. The Permittee may incorporate applicable portions of plans prepared for other purposes. Plans or portions of plans incorporated into an SWPPP become enforceable requirements of this permit.
4. The Permittee shall prepare the SWPPP in accordance with the guidance provided in the *Stormwater Pollution Prevention Planning for Industrial Facilities*. The plan shall contain the following elements:
  - a. Assessment and description of existing and potential pollutant sources.
  - b. A description of the operational BMPs.
  - c. A description of selected source-control BMPs.
  - d. When necessary, a description of the erosion and sediment control BMPs.
  - e. When necessary, a description of the treatment BMPs.
  - f. An implementation schedule.

C. Implementation

The Permittee shall conduct two inspections per year - one during the wet season (October 1 – April 30) and the other during the dry season (May 1 – September 30).

1. The wet season inspection shall be conducted during a rainfall event by personnel named in the Stormwater Pollution Prevention Plan (SWPPP) to verify that the description of potential pollutant sources required under this permit are accurate; the site map as required in the SWPPP has been updated or otherwise modified to reflect current conditions; and the controls to reduce pollutants in stormwater discharges associated with industrial activity identified in the SWPPP are being implemented and are adequate. The wet weather inspection shall include observations of the presence of floating materials, suspended solids, oil and grease, discolorations, turbidity, odor, etc. in the stormwater discharge(s).
2. Personnel named in the SWPPP shall conduct the dry season inspection. The dry season inspection shall determine the presence of unpermitted non-stormwater discharges such as domestic wastewater, noncontact cooling water, or process wastewater (including *leachate*) to the *stormwater drainage system*. If an unpermitted, non-stormwater discharge is discovered, the Permittee shall immediately notify the Department.

D. Plan Evaluation

The Permittee shall evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate and properly implemented in accordance with the terms of the permit or whether additional controls are needed. A record shall be maintained summarizing the results of inspections and include a certification, in accordance with Condition S3.I, that the facility is in compliance with the plan and in compliance with this permit. The record shall identify any incidents of noncompliance.

*B. Mixing Zone Description*

The Permittee discharges effluent to the head box of Weyerhaeuser's east and west outfalls (001/002) of the Longview facility. The mixing zones defined for those outfalls follow:

East Outfall: The mixing zone shall extend from the point of discharge for a distance of 228 feet in any direction. Within the East Outfall mixing zone, extending from the point of discharge only 22.8 feet in any direction, acute criteria may exceed defined Permit limits. We refer to the edge of this interior zone as the acute criteria compliance boundary.

West Outfall: The mixing zone shall extend from the point of discharge for a distance of 221 feet in any direction. Within the West Outfall mixing zone, extending from the point of discharge only 22.1 feet in any direction, acute criteria may exceed defined Permit limits. We refer to the edge of this interior zone as the acute criteria compliance boundary.

We determined dilution factors for Outfall 001/002, using a model for both combined effluents from the Mint Farm Generation facility and Weyerhaeuser, and for the Mint Farm Generation facility effluent discharging alone. When combined, the Mint Farm Generation effluent typically will be diluted by a factor of more than 100, in the outfall before final discharge. The most restrictive dilution factors therefore apply when the Mint Farm Generation Facility is the only discharger. We also factored in the water source used to dilute the effluent, as shown below:

|                           | Acute | Chronic |
|---------------------------|-------|---------|
| Filter Plant Water Source | 44    | 223     |
| Groundwater Well Source   | 43    | 193     |

*C. Temperature Study*

Rather than conduct a receiving water temperature study, Ecology requires the Permittee to submit a report detailing one year of full operating data. Those details include influent water flow and temperature, discharge flow and water temperature, and megawatts produced. The Permittee shall collect the data and report it at the same frequency as this Permit requires monitoring data reporting.

*D. Sampling and Analytical Procedures*

Samples and measurements taken to show compliance with Permit requirements of this permit shall be representative of the volume and nature of the monitored parameters. The Permittee shall also conduct representative sampling of any unusual discharge or discharge condition, as well as sampling during bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to show the Permittee's compliance with this Permit's water and wastewater monitoring requirements, shall conform to the latest revision of either the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part

136, or to the *Standard Methods for the Examination of Water and Wastewater* published by the American Public Health Association (APHA).

*E. Flow Measurement*

The Permittee shall ensure the accuracy and reliability of monitored flow measurements by selecting and using appropriate flow measurement devices and methods consistent with accepted scientific practices. The Permittee shall install, calibrate, and maintain the devices to ensure accurate measurement, consistent with the accepted industry standard for each type of device. The Permittee shall inspect each device at least once per year, and shall calibrate it as frequently as the manufacturer recommends. The Permittee shall maintain calibration records for at least three years.

*F. Laboratory Accreditation*

The Permittee shall ensure that all monitoring data reports it must submit to Ecology are prepared by a laboratory registered or accredited under the provisions of *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Ecology exempts water flow, temperature, settleable solids, conductivity, pH data reports, and internal process control parameters from this requirement. But any conductivity and pH data reports must be accredited if prepared by an otherwise registered or accredited laboratory. Ecology currently exempts crops, soils, and hazardous waste data from this requirement, pending accreditation of laboratories to analyze these media.

## **S2. REPORTING AND RECORDKEEPING REQUIREMENTS**

The Permittee shall monitor its processes and pollution control devices and report resulting data in the manner prescribed below. Falsifying any information submitted to the Department shall constitute a violation of this Permit.

*A. Reporting*

The first monitoring period begins on the Permit effective date, fifteen days after startup. The Permittee shall submit monitoring results monthly, unless otherwise specified in this permit. The Permittee shall summarize and report monitoring test analysis and results, conducted by the facility's laboratory, during each monitoring period. The Permittee's facility laboratory shall submit the information summaries on a Discharge Monitoring Report form provided, or on forms otherwise approved, by Ecology. The Permittee shall submit the reports no later than the 15<sup>th</sup> day of the month following each completed monitoring period. For samples sent to an outside laboratory for analysis, the Permittee shall submit the monitoring data results to Ecology no later than 45 days following the sampling period --or according to another schedule that Ecology approved previously.

In addition to the monthly monitoring reports, the Permittee shall submit a table which lists the following information, in accordance with the monitoring requirements of S.1: the date (each day of the month), flow (MGD), TSS (lb/day), and pH (maximum and minimum) measurements.

The Permittee shall send the report(s) to the Department of Ecology, Industrial Section – P.O. Box 7706, Olympia, Washington 98504-7600.

All lab reports providing organic and metal parameters data for the Permittee's records shall include the following information: (1) the sample date, (2) sample location, and (3) date of analysis; (4) the parameter name, (5) CAS number, and (6) analytical method/ number; (7) the minimum level (ML), method detection limit, and laboratory published quantitation level (PQL), (8) reporting units, and, (9) concentration detected.

The Permittee shall submit monthly Discharge Monitoring Report forms regardless of whether the facility was discharging during the month. If there was no discharge or the facility was not operating during a given monitoring period, the Permittee must submit the form as required, with the words "no discharge" entered in place of the monitoring results.

*B. Records Retention*

The Permittee shall retain records of all monitoring information for a minimum of three (3) years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall extend during the course of any unresolved litigation about the Permittee's pollutants discharge, or when Ecology's Director requests it.

*C. Recording Results*

For each measurement taken or each sample collected and analyzed, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling or measurement; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) the individual who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

*D. Representative Sampling*

Sampling and measurements taken to fulfill Permit requirements for TSS at outfall 001/002, shall be representative of the volume and nature of the monitored discharge, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

*E. Additional Monitoring by the Permittee*

If the Permittee uses test procedures specified by Condition S1. of this Permit to monitor any pollutant more frequently than required, then the Permittee shall include those monitoring results in the calculation and reporting of the data submitted in the Permittee's DMR. This requirement shall not apply to samples taken at locations other than the specified monitoring locations, to samples taken and/or tested by different analytical techniques, or to samples tested by uncertified labs.

*F. Noncompliance Notification*

In the event the Permittee is unable to comply with any of these Permit terms and conditions, due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance; correct the problem and, if applicable, repeat sampling and analysis. (The Permittee shall submit the new sampling and analysis results to Ecology within thirty (30) days after becoming aware of the violation.
2. Immediately notify Ecology of the failure to comply, and of corrective action needed.
3. Submit a detailed written report to the Department within thirty (30) days (five [5] working days for upsets and bypasses), unless Ecology requests it earlier. The report shall describe the noncompliance, including exact dates and times; if the noncompliance has not been corrected, the length of time the Permittee expects to continue operating out of compliance with this Permit, and the steps --taken or planned-- to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this Permit or from the resulting liability for failure to comply.

**S3. OPERATION AND MAINTENANCE**

The Permittee shall, at all times, properly operate and maintain all treatment and control facilities or systems (and related appurtenances) installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision also applies to the operation and maintenance of back-up or auxiliary facilities or similar systems, which the Permittee uses only when necessary to achieve compliance with the conditions of this Permit.

The Permittee shall notify the Department within 24 hours of a spill, overflow, or bypass-- from any portion of the wastewater treatment facility-- with the potential to exceed allowed Permit limits.

The Permittee shall take all reasonable steps to prevent or minimize any discharge, sludge use, or disposal that has a reasonable likelihood of violating this Permit and adversely affecting human health or the environment.

**S4. SOLID WASTE DISPOSAL**

*A. Solid Waste Handling*

The Permittee shall handle and dispose all solid waste material in such a manner as to prevent its entry into the state's ground water or surface water(s).

*B. Leachate*

The Permittee shall not allow leachate from its solid waste material to enter State waters without first applying all known, available and reasonable methods of treatment; nor shall the Permittee allow such leachate to cause violations of State Surface Water Quality Standards [Chapter 173-201A WAC], or of State Ground Water Quality Standards, [Chapter 173-200 WAC]. The Permittee shall apply for any such Permit or permit modification as may be required to control such discharges to State (under) ground water or surface waters.

*C. Solid Waste Control Plan*

The Permittee shall submit an updated solid waste control plan, within six (6) months from the effective date of this Permit, for Ecology's review and approval. This plan shall address all solid wastes except those regulated by Chapter 173-303 WAC (Dangerous Waste Regulations). The Permittee's solid waste control plan shall include, at a minimum: a description of the waste, their source within the facility, the usual generation rate, and appropriate disposal methods for these solid wastes. This plan shall not conflict with any approved local government's solid waste management plan. The Permittee must submit any proposed revision or modification of the solid waste handling plan to Ecology. The Permittee shall comply with the plan and any modifications approved thereof.

**S5. NON-ROUTINE OR UNANTICIPATED DISCHARGES**

A. Beginning fifteen days after startup (the Permit effective date), the Permittee may discharge non-routine wastewater, on a case-by-case basis, if Ecology first approves it. Prior to any such discharge, the Permittee shall (at minimum) provide the following information to Ecology:

1. The nature of the non-routine activity that generates the discharge.
2. Any alternatives to discharging it -- such as reusing, storing, or recycling the wastewater.
3. The total volume of wastewater the Permittee expects to discharge during the non-routine activity.
4. The results of the chemical analysis of the water. The Permittee shall analyze the water for all constituents limited by this Permit. The analysis shall also include hardness, any metals content limited by water quality standards, and any other parameter Ecology deems necessary. All discharges must comply with effluent limitations established in Condition S1. of this Permit, with state water quality standards, with sediment management standards, and with any other limitations Ecology may impose.
5. The date on which the Permittee proposes to discharge and the rate at which the Permittee plans to discharge the wastewater, expressed in gallons per minute. The discharge rate shall be limited, to avoid causing erosion of ditches or structural damage to culverts and their entrances or exits.
6. If the Permittee proposes to discharge the non-routine wastewater to a municipal storm drain, with Ecology's approval, the Permittee shall notify the municipality of the nature and amount of the wastewater, and of the discharge date and time schedule.

B. The discharge cannot proceed until Ecology has reviewed the information provided and authorized the discharge in writing. Ecology will confer the authorization either by sending a letter to the Permittee or by issuing an Administrative Order.

#### **S6. SPILL PLAN**

Within 6 months from the effective date of the permit, the Permittee shall submit an updated spill control plan to Ecology. The plan shall describe the activities and equipment the Permittee will use to prevent, contain, and control spills or unplanned discharges of: 1) oil and petroleum products; 2) materials, which when spilled, or otherwise released into the environment, designates as Dangerous (DW) or Extremely Hazardous Waste (EHW) under procedures set forth in WAC 173-303-070; or 3) other materials which may become pollutants or cause pollution upon reaching the State's waters. The Permittee shall also review and update the Spill Plan, as needed (at least annually). The Permittee shall send a copy of each changed or updated plan to Ecology. The Permittee shall act in accordance with the latest plan and any supplements, throughout the term of this Permit. The Permittee's updated spill control plan shall include the following elements:

- a) A description of the reporting system for alerting responsible managers and legal authorities in the event of a spill.
- b) A list of oil and chemicals used, processed, or stored at the facility, which may become pollutants when spilled or may cause pollution upon reaching State waters.
- c) A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.

For the purpose of meeting this requirement, the Permittee may submit plans and manuals, or portions thereof, as required by 33 CFR 154, by 40 CFR 109, 40 CFR 110, and 40 CFR Part 112; by the Federal Oil Pollution Act of 1990; and by Chapter 173-181 WAC and the contingency plans required by Chapter 173-303 WAC.

#### **S7. ACUTE TOXICITY**

##### *A. Effluent Characterization*

The Permittee shall conduct two types of acute toxicity tests on the final effluent to determine the presence and amount of acute (lethal) toxicity. The Permittee shall apply the two acute toxicity tests (listed below) to each sample taken for effluent characterization.

The Permittee shall test for acute toxicity in its effluent, each quarter, for the first year of operation. The Permittee's acute toxicity testing method shall follow the protocols, monitoring requirements, and quality assurance/quality control procedures specified in this section. The Permittee shall use a dilution series, consisting of a minimum of five concentrations and a control, to estimate the concentration lethal to 50 percent of the organisms (LC<sub>50</sub>). The Permittee shall also report the percentage of species survival in 100 percent effluent.

The Permittee shall begin testing in the first quarter following startup.

The Permittee shall conduct acute toxicity tests using the following species and protocols:

1. Fathead minnow, *Pimephales promelas* (96-hour static-renewal test, method: EPA/600/4-90/027F).
2. *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48-hour static test, method: EPA/600/4-90/027F). The Permittee shall choose one of these three species and use it consistently throughout effluent characterization.

*B. Sampling and Reporting Requirements*

1. The Permittee shall report all effluent characterization or compliance monitoring results to Ecology, in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. These reports shall contain bench sheets and reference toxicant results for each test method applied. If the lab provides the toxicity test data to the Permittee on a disk for electronic entry into Ecology's database, then the Permittee shall send the disk to Ecology along with the printed test report, bench sheets, and reference toxicant results.
2. The Permittee shall conduct the testing on 24-hour composite effluent samples. The Permittee shall cool composite samples taken for toxicity testing to 4 degrees Celsius during collection, and shall send those collected samples to the lab immediately upon completion. The Permittee shall ship grab samples --on ice-- to the lab immediately upon collection. A grab sample received at the testing lab within one hour after collection, must register a temperature below 20° C at receipt. A grab sample received at the testing lab within 4 hours after collection, must register a temperature below 12° C at receipt. All other samples must be below 8° C at receipt. The lab shall begin the toxicity testing as soon as possible, but no later than 36 hours after sampling ended. The lab shall store all samples at 4° C, in the dark, from receipt until test completion.
3. The Permittee shall assure that all samples and test solutions measured for toxicity, meet those water quality measurements specified in the most recent version of Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*.
4. Results of the Permittee's toxicity tests shall meet both the quality assurance criteria and the test conditions described in the most recent versions of the EPA manual listed in subsection A., and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If Ecology determines that the test results are invalid or anomalous, then the Permittee shall repeat the required testing process with freshly collected effluent.
5. Control water and dilution water used to conduct the Permittee's testing shall be either laboratory water meeting the requirements of the EPA manual listed in subsection A, or pristine natural water of sufficient quality for good control performance.
6. The Permittee shall run whole effluent toxicity tests on an unmodified sample of final effluent.



7. The Permittee may choose to conduct a full dilution series test, during compliance monitoring, to determine dose response. In this case, the series must include a minimum of five graduated effluent concentrations and a control. The series of concentrations must include the Acute Critical Effluent Concentration (ACEC) – equal to 16 percent effluent.
8. The Permittee must repeat all whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, if the tested samples fail the acute statistical power standard of 29 percent (as defined in WAC 173-205-020). The Permittee must repeat the testing on a fresh sample, with an increased number of replicates to increase the power.

## **S8. CHRONIC TOXICITY**

### **A. Effluent Characterization**

The Permittee shall conduct two chronic toxicity tests on each sample of the final effluent, taken for effluent characterization.

The Permittee shall conduct effluent testing for chronic toxicity twice, during the first year. The Permittee shall conduct those chronic toxicity tests during the time frame when the Permittee conducts acute toxicity testing. The Permittee shall conduct chronic toxicity testing during effluent characterization, on a series of at least five graduated concentrations of effluent, to determine appropriate point estimates. This series of dilutions shall include 2.3% effluent, which is the Acute Critical Effluent Concentration (ACEC). The Permittee shall compare the ACEC to the control, using hypothesis testing at the 0.05 level of significance, as described in Appendix H, EPA/600/4-89/001.

The Permittee shall conduct chronic toxicity tests, using the following two species and the most recent version of these federal protocols:

| Freshwater Chronic Toxicity Test Species |                            | Method           |
|--|----------------------------|------------------|
| Fathead minnow                           | <i>Pimephales promelas</i> | EPA/600/4-91/002 |
| Water flea                               | <i>Ceriodaphnia dubia</i>  | EPA/600/4-91/002 |

### **B. Sampling and Reporting Requirements**

1. The Permittee shall report all effluent characterization or compliance monitoring results, in accordance with the most recent version of Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. These reports shall contain bench sheets and reference toxicant results for each test method applied. If the lab provides the toxicity test data on a disk, for electronic entry into Ecology's database, then the Permittee shall send the disk to Ecology along with the printed test report, bench sheets, and reference toxicant results.
2. The Permittee shall conduct testing on 24-hour composite effluent samples. The Permittee shall keep the composite samples taken for toxicity testing cooled to 4 degrees

Celsius during sample collection, and shall send them to the lab immediately upon completion. The Permittee shall ship grab samples --on ice-- to the lab immediately upon collection. A grab sample received at the testing lab within one hour after collection, must register a temperature below 20° C at receipt. A grab sample received at the testing lab within 4 hours after collection, must register a temperature below 12° C at receipt. All other samples must be below 8° C at receipt. The lab shall begin the toxicity testing as soon as possible, but no later than 36 hours after sampling ended. The lab shall store all samples at 4° C, in the dark, from receipt until the completion of testing.

3. The Permittee shall assure that all samples and test solutions measured for toxicity, meet those water quality measurements specified in the most recent version of Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*.
4. Results of the Permittee's toxicity tests shall meet both the quality assurance criteria and the test conditions described in the most recent versions of the EPA manual listed in subsection A., and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If Ecology determines that the test results are invalid or anomalous, then the Permittee shall repeat the required testing process with freshly collected effluent.
5. Control water and dilution water used to conduct the Permittee's testing shall be either laboratory water meeting the requirements of the EPA manual listed in subsection A, or pristine natural water of sufficient quality for good control performance
6. The Permittee shall run whole effluent toxicity tests on an unmodified sample of final effluent.
7. If the Permittee chooses to conduct a full dilution series test during compliance monitoring, to determine dose response, then the series must have a minimum of five graduated effluent concentrations and a control sample. The series of concentrations must include both the Acute Critical Effluent Concentration, and the Chronic Critical Effluent Concentration (16, and 5 percent effluent, respectively).
8. The Permittee must repeat all whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, if the tested samples fail the acute statistical power standard of 29 percent (as defined in WAC 173-205-020). The Permittee must repeat the testing on a fresh sample, with an increased number of replicates to increase the power.

## **S9. OTHER REQUIREMENTS AND PROVISIONS**

### **A. Upset Defense Provisions**

The Upset provisions listed in 40 CFR Section 122.41(n), apply to activities performed pursuant to this Permit.

*B. Permit Continuation*

The Conditions prescribed in this Permit shall continue in force beyond the expiration date (until the effective date of any subsequent permit renewal) if the Permittee submits a timely Application for Permit Renewal, and the Permittee fulfills the other conditions in 40 CFR 122.6 and WAC 173-220-180 (5).

## GENERAL CONDITIONS

### **G1. SIGNATORY REQUIREMENTS**

The Permittee shall sign and certify all applications, reports, or information it submits to the Department of Ecology to fulfill requirements of this National Pollutant Discharge Elimination System Permit.

*A. Authorized Applicant.*

The entity's responsible person--

- Corporate Officer (of at least the level of vice president) of a corporation, or
- General Partner of a partnership, or
- Proprietor of a sole proprietorship,

--shall sign and certify all permit application materials.

*B. Permittee's Representative.*

The person described above --or a duly authorized representative of that person— shall sign all reports required by this Permit and any other information requested by the Department. A person is a duly authorized representative only if:

1. The person described above writes the authorization and sends it to the Department, and
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

*C. Authorization Change.*

If an authorization lapses because a different individual or position has responsibility for the overall operation of the facility, then the Permittee must submit a new authorization to Ecology satisfying the requirements of B.2. The Permittee may submit the new authorization prior to --or together with-- reports, information, or applications that require an authorized signature.

*D. Certification.*

Any person signing a document under this section shall --by signing—thus attest to the following:

“I certify under penalty of law, that this document and all attachments were prepared under

my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

## **G2. RIGHT OF ENTRY**

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law, to:

- A. Enter upon the premises where a discharge is located, or where the terms and conditions of this permit require the Permittee to keep any related records;
- B. Access, at reasonable times, and copy any records required by the conditions of this Permit;
- C. Inspect, at reasonable times, any monitoring equipment or any monitoring method required by the conditions of this Permit;
- D. Inspect, at reasonable times, any collection, treatment, pollution control, or discharge facilities; and
- E. Sample, at reasonable times, any of the Permittee’s pollutant discharges.

## **G3. PERMIT ACTIONS**

The Department may modify, suspend, or terminate this Permit --in whole or in part-- for any of the following causes:

- A. Violation of any permit term or condition;
- B. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;
- C. A material change in quantity or type of waste disposal;
- D. A material change in the condition of the waters of the State; or
- E. Nonpayment of fees assessed pursuant to RCW 90.48.465.

The Department may also modify this permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, including promulgation or revisions of regulations or new information.

## **G4. REPORTING A CAUSE FOR MODIFICATION**

If the Permittee anticipates a material change in the quantity or type of discharge (a change not specifically authorized by this Permit), then the Permittee shall submit a new application to the Department, or submit a supplement to the previous application, that complies with federal and state requirements, limits, and standards for NPDES Permits. The Permittee shall submit such application to the Department, along with any required engineering plans and reports, at least 60

days prior to undertaking the anticipated changes. Submittal of this application' supplement does not relieve the Permittee of the duty to comply with the existing permit.

#### **G5. PLAN REVIEW REQUIRED**

Prior to constructing or modifying any wastewater control facility, the Permittee shall submit for the Department's approval, an engineering report and detailed plans and specifications as detailed in Chapter 173-240 WAC. The Permittee should submit the engineering reports, plans, and specifications, at least 180 days prior to the planned start of construction. The Permittee shall construct and operate the new facilities in accordance with the approved plans.

#### **G6. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in this Permit excuses the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

#### **G7. DUTY TO REAPPLY**

The Permittee must apply for permit renewal at least 180 days prior to the specified expiration date of this Permit.

#### **G8. PERMIT TRANSFER**

This permit automatically transfers to a new owner or operator if:

- A. The Permittee of record and the new owner or operator submit to the Department their written agreement, containing a specific date for transfer of permit responsibility, coverage, and liability;
- B. The Permittee of record provides a copy of the existing Permit to the new owner; and
- C. The Department does not notify the Permittee of the need to modify the Permit.

Unless this Permit automatically transfers (according to section A. above), the Permittee of record may transfer this Permit only after it is modified to identify the new Permittee and to incorporate such other requirements as the Department determines determined necessary.

#### **G9. REDUCED PRODUCTION FOR COMPLIANCE**

To maintain compliance with this Permit, the Permittee shall control production and/or all discharges during a reduction, loss, failure, or bypass of the treatment facility--until the treatment facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the treatment facility's primary source of power is reduced, lost, or fails.

#### **G10. REMOVED SUBSTANCES**

The Permittee shall not re-suspend or reintroduce to the final effluent stream those collected screenings, grit, solids, sludge, filter backwash, or other pollutants removed in the course of treating or controlling wastewater, for discharge to State waters.

#### **G11. TOXIC POLLUTANTS**

If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified therein) established under Section 307(a) of the Clean Water Act imposes a more stringent toxic pollutant standard or prohibition than any existing Permit limitation upon such pollutant, then the Department shall institute proceedings to modify or to revoke and reissue this Permit to conform to such stringent new toxic effluent standard or prohibition.

#### **G12. OTHER REQUIREMENTS OF 40 CFR**

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this Permit by reference.

#### **G13. ADDITIONAL MONITORING**

The Department may add specific monitoring requirements to this Permit by issuing an Administrative Order or Permit Modification.

#### **G14. PAYMENT OF FEES**

The Permittee shall submit timely payment of fees associated with this Permit, as assessed by the Department under Chapter 173-224 WAC. The Department may revoke this Permit if established fees are not paid.

#### **G15. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime. Upon conviction thereof, such person shall be punished by a fine of up to ten-thousand dollars and costs of prosecution, or by imprisonment, in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten-thousand dollars for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed a separate and distinct violation.